

PATENT CLAIMS

1. Method for producing elongate support element (21) with associated seats (22, 23) for replacement structure (9) in human body (jaw) (2), via which seats (22, 23) the support element can be applied to implants (or to spacers on these implants), where the longitudinal axes (centre axes) of the seats connect with or are parallel to the longitudinal axes (centre axes) of the implants in order to satisfy set accuracy of fit requirements (2/100 mm), the method comprising the stages of:

- a) identification (13) and possible modelling (11) of the dental situation (1) in question,
  - b) supplying information (16) extracted from stage a) to computer equipment,
  - c) operating the computer equipment to use the supplied information (16) and further information (17) input to the computer equipment to simulate and determine the structure (4, 4') of the support element in or at the replacement structure (9),
  - d) extracting, from the computer equipment (15), milling coordinates information (data) (19) used for controlling the milling of a blank in milling equipment (20),
  - e) transmitting the milling coordinates information (data) (19) to the milling equipment (20),
  - f) controlling the milling equipment to produce the support element from the blank, characterized in that
  - f) the milling equipment, with the aid of the said milling information (data), in addition to executing the support element shape determined in the computer equipment from the blank, can also be used for control in order to mill out the said seats (22, 23) directly from the blank/support element material.
2. Arrangement for producing elongate support element (4, 21) with associated seats for replacement

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support element is designed with seats (22, 23) via which the support element can be applied to implants (3) and/or to spacers on these implants, where the centre axes (24, 25) of the seats connect with the centre axes (8, 9) of the implants so that fixed accuracy of fit requirements (of at least about 2/100 mm) result, characterized in that the support element is made of homogeneous material (27) and in that each seat wall (26a) is executed directly from the homogeneous support element material (27).

4. Product according to Patent Claim 3, characterized in that each seat wall consists of a surface (26a) ground directly in the homogeneous material.

5. Product according to Patent Claim 3 or 4, characterized in that the material strength around each seat has essentially the same material strength as the rest of the support element material (27).

6. Product according to Patent Claim 3, 4 or 5, characterized in that each seat wall (26a) is formed directly from the support element material (27) without intermediate layers of material compositions or material alterations.

7. Product according to any of Patent Claims 3 - 6, characterized in that each seat wall (26a) has the same chemical composition as the rest of the support element material (27).

8. Use of recessing (26) directly in the material (27) of a blank in conjunction with the production of a dental product from the blank in milling equipment (20), characterized in that the recessing is used for receiving the seats (22, 23) in the product in the form of a support element (4) included in tooth replacement structure (9), the seats (22, 23) of which with set accuracy of fit requirements (at least about 2/100 mm) are to be applied to implants located in the human body and/or to spacers on these implants.

9. Use according to Patent Claim 8, characterized in that the recessing (26) is used for forming a seat

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